

## PRINTED CIRCUIT BOARD HAVING PERMANENT SOLDER MASK

A printed circuit board having a permanent solder mask includes a substrate made of a glassfiber reinforced epoxy resin material. The top and bottom surfaces of the substrate are disposed thereon a conductive pattern respectively. An epoxy resin solder mask is coated on each surface of the substrate in such a way that the conductive pattern is divided into a sheltered portion covered by the solder mask and an unsheltered portion exposed outside. The solder mask also has an even and smooth outer surface with a micro-roughness ranging between  $0.5\mu\text{m}$ ~ $10\mu\text{m}$  and an optimum thickness ranging between  $2\mu\text{m}$ ~ $200\mu\text{m}$ .